

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

BUREAU OF AIR

DIVISION of AIR POLLUTION CONTROL

PERMIT SECTION

PROJECT SUMMARY for the
DRAFT CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT

WinCup Holdings, Inc.
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West Chicago, Illinois 60185

Illinois EPA ID Number: 043090ABX

Application Number: 95120327

Application Type: Renewal of CAAPP Permit

Start of Public Comment Period: October 5, 2006

Close of Public Comment Period: November 4, 2006

Permit Engineer/Technical Contact: Dan Punzak, P.E., 217/782-2113

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(This Project Summary generally describes the source and explains the draft permit. This document has been prepared pursuant to Section 39.5(8)(b) of the Illinois Environmental Protection Act, which requires "a statement that sets forth the legal and factual basis for the draft CAAPP permit conditions.")

I. INTRODUCTION

This source has applied for a renewal of its Clean Air Act Permit Program (CAAPP) operating permit. The CAAPP is the program established in Illinois for operating permits for significant stationary sources as required by Title V of the federal Clean Air Act and Section 39.5 of Illinois' Environmental Protection Act. The conditions in a CAAPP permit are enforceable by the Illinois Environmental Protection Agency (Illinois EPA), the USEPA, and the public. This document is for informational purposes only and does not shield the Permittee from enforcement actions or its responsibility to comply with applicable regulations. This document shall not constitute a defense to a violation of the Act or any rule or regulation.

A CAAPP permit contains conditions identifying the applicable state and federal air pollution control requirements that apply to a source. The permit also establishes emission limits, appropriate compliance procedures, and specific operational flexibility. The appropriate compliance procedures may include monitoring, record keeping, and reporting to show compliance with these requirements. The Permittee must carry out these procedures on an on-going basis to demonstrate that the source is operating in accordance with the requirements of the permit. Further explanations of the specific provisions of the draft CAAPP permit are contained in the attachments to this document, which also identify the various emission units at the source.

II. GENERAL SOURCE DESCRIPTION

a. Nature of source

The source manufactures Polystyrene cups and containers from expandable polystyrene beads.

b. Ambient air quality status for the area

The source is located in an area that is currently designated nonattainment for the National Ambient Air Quality Standards for ozone (moderate nonattainment) and PM_{2.5} and attainment or unclassifiable for all other criteria pollutants (nitrogen oxides, carbon monoxide, sulfur dioxide and lead).

c. Major source status

The source requires a CAAPP permit as a major source of VOM emissions.

d. Source Emissions

The following table lists annual emissions of criteria pollutants from this source, as reported in the Annual Emission Reports sent to the Illinois EPA. Normally the

HAP emitted in the highest amount would be reported on this table but the only VOM emitted is not a HAP.

Pollutant	Annual Emissions (tons)				
	2005	2004	2003	2002	2001
CO	15.35	16.20	15.96	16.46	15.97
NOx	18.28	19.28	19.00	19.59	19.01
PM	1.39	1.47	1.44	1.49	1.45
SO2	0.11	0.12	0.11	0.12	0.11
VOM	50.30	54.11	51.77	96.79	93.62

III. NEW SOURCE REVIEW/TITLE I CONDITIONS

This draft permit contains terms and conditions that address the applicability of permit programs for new and modified sources under Title I of the Clean Air Act (CAA) and regulations promulgated thereunder, including 40 CFR 52.21, Prevention of Significant Deterioration (PSD) and 35 IAC Part 203, Major Stationary Sources Construction and Modification. Any such terms and conditions are identified within the draft permit by T1, T1R, or T1N. Any conditions established in a construction permit pursuant to Title I and not revised or deleted in this draft permit, remain in effect pursuant to Title I provisions until such time that the Illinois EPA revises or deletes them. Where the source has requested that the Illinois EPA establish new conditions or revise such conditions in a Title I permit, those conditions are consistent with the information provided in the CAAPP application and will remain in effect pursuant to Title I provisions until such time that the Illinois EPA revises or deletes them.

This draft permit would not establish any new Title I requirements or revised Title I requirements.

IV. COMPLIANCE INFORMATION

The source has certified compliance with all applicable rules and regulations; therefore, a compliance schedule is not required for this source. In addition, the draft permit requires the source to certify its compliance status on an annual basis.

V. PROPOSED ILLINOIS EPA ACTION / REQUEST FOR COMMENTS

It is the Illinois EPA's preliminary determination that this source's permit application meets the standards for issuance of a CAAPP permit. The Illinois EPA is therefore proposing to issue a CAAPP permit, subject to the conditions proposed in the draft permit.

Comments are requested by the Illinois EPA for the draft or proposed permit, pursuant to 35 IAC Part 252 and Sections 39.5(8) and (9) of the Illinois Environmental Protection Act. A final decision on the draft or proposed permit will not be made until the public, affected states, and USEPA have had an opportunity to comment. The Illinois EPA is not required to accept recommendations that are not based on applicable requirements. If substantial public interest is shown in this matter, the Illinois EPA will consider holding a public hearing in accordance with 35 IAC Part 166.

ATTACHMENT 1: Summary of Source-Wide Requirements

The following table indicates the source-wide emissions control programs and planning requirements that are applicable to this source. These programs are addressed in Sections 5 and 6 of the draft permit.

Program/Plan	Applicable
Emissions Reduction Market System (ERMS) ^a	Yes
Nitrogen Oxides (NO _x) Trading Program	No
Acid Rain Program	No
Compliance Assurance Monitoring (CAM) Plan ^b	Yes
Fugitive Particulate Matter (PM) Operating Program	No
Risk Management Plan (RMP)	No
PM ₁₀ Contingency Measure Plan	No

- a. The ERMS is a market-based program designed to reduce VOM emissions from stationary sources located in the Chicago ozone non-attainment area in order to contribute to reasonable further progress toward attainment (35 IAC Part 205). If applicable, this program is further described in Section 6.0 of the draft permit, including the Illinois EPA's determination of the source's baseline emissions and allotment of trading units under the ERMS.
- b. Compliance Assurance Monitoring (CAM) is a program for pollutant-specific emission units which use an add-on control device to achieve compliance with an emission limitation or standard. A CAM plan is required for such units that have potential pre-control device emissions of the applicable regulated air pollutant that are equal to or greater than major source threshold levels, and are not specifically exempt by 40 CFR Part 64. Subject units and the CAM plans are identified in Attachment 3 of the draft permit.

ATTACHMENT 2: Summary of Requirements for Specific Emission Units

The following tables include information on the requirements that apply to significant emission units at this source. The requirements are found in Section 7 of the draft permit, which is further divided into subsection, i.e., Section 7.1, 7.2, etc., for the different categories of units at the source. A separate table is provided for each subsection in Section 7 of the draft permit. An explanation of acronyms and abbreviations is contained in Section 2 of the draft permit.

Table 1 (Section 7.1 of the draft permit)

Emission Unit – Natural Gas Boilers	
Description	Three small boilers ranging from 12 to 26 mmBtu/hr firing rates
Date Constructed	1974, 1975 and 1988
Emission Control Equipment	None but two of the boilers act as controls for units in Section 7.2
Applicable Rules and Requirements	
Emission Standards	<ul style="list-style-type: none"> • 35 IAC 216.121: Limits CO to 200 ppm • 35 IAC 212.123(b) for opacity
Streamlining	N/A
Title I Conditions	<ul style="list-style-type: none"> • The draft permit contains limits on operation and emissions in Conditions 7.1.5 and 7.1.6. These limits were created when the first CAAPP permit for this source was issued.
Non-applicability	<ul style="list-style-type: none"> • NSPS Subpart Dc: These units were all constructed prior to June 1989, the applicability date for small boilers. Even if an emission standard were applicable it would impose no new emission standards since the boilers do not fire oil. • CAM: As boilers the units are not subject to CAM, but two of the boilers serve as controls for the raw material preparation process in Section 7.2 and thus must comply with CAM. See below.
Periodic Monitoring (other than basic regulatory requirements)	
Testing	Not required
Emissions Monitoring	None

Emission Unit – Natural Gas Boilers	
Operational Monitoring	<ul style="list-style-type: none"> Required by CAM for two of the boilers. Each of them is equipped with a thermocouple that measures combustion chamber temperature.
Inspections	Not required
Recordkeeping	CAM recordkeeping plus records to verify compliance with annual limits in Condition 7.1.6.
Other	
Reporting	
Prompt Reporting	N/A
Other Reporting	CAM reporting
Other Information	
Footnotes	

Table 2 (Section 7.2 of the draft permit)

Emission Unit – Raw Material preparation	
Description	The expandable polystyrene beads are partially expanded using steam
Date Constructed	One of them in 1995, the others in 1968
Emission Control Equipment	The firebox of two of the boilers listed in Table 1 (Section 7.1 of the permit) are used as the control for expanders
Applicable Rules and Requirements	
Emission Standards	<ul style="list-style-type: none"> • 35 IAC 218.986 (Subpart TT): This type of process is specifically cited in the applicability part of Subpart TT • 35 IAC 212 Subpart L: Although as a process emission unit this process is subject to the PM rule, any PM would also be destroyed by the boiler firebox and thus the process has negligible PM.
Streamlining	N/A
Title I Conditions	<ul style="list-style-type: none"> • The draft permit contains limits on operation and emissions in Conditions 7.2.5 and 7.2.6. These limits were incorporated from Permit 95050223.
Non-applicability	<ul style="list-style-type: none"> • 35 IAC 218.301: The expanding agent and thus the material emitted is pentane. Pentane is not photochemically reactive and therefore the 8. • Any NESHAP: Pentane, the only VOM emitted is not a HAP; therefore this source is not a major source of HAPs and thus no NESHAP has even been proposed for this type of process.
Periodic Monitoring (other than basic regulatory requirements)	
Testing	<ul style="list-style-type: none"> • The IEPA may require an emissions control efficiency for the boiler firebox but the standard is rather low (81%) and is not expected to present difficulty meeting that standard.
Emissions Monitoring	N/A
Operational Monitoring	Table 3 discusses the CAM monitoring for control of these units.
Inspections	None
Recordkeeping	In addition to standard type records, the source must keep records of the pentane content of the beads as received as there is a limit on this value in Condition 7.2.5.
Other	

Emission Unit – Raw Material preparation	
Reporting	
Prompt Reporting	Prompt reporting is required is polystyrene usage or pentane content of the beads exceeds the specified limit of 6.1%.
Other Reporting	N/A
Other Information	
Footnotes	

Table 3 (Section 7.3 of the draft permit)

Emission Unit – Cup Manufacturing	
Description	There are numerous individual cup machines in which the final expansion of the beads is done into the shape of cups. Each individual machine has rather small emissions.
Date Constructed	Individual machines are frequently replaced and there are no limits on emissions from individual machines along as the total use of polystyrene beads does not exceed the rate in Section 7.2.5
Emission Control Equipment	None
Applicable Rules and Requirements	
Emission Standards	<ul style="list-style-type: none"> • 35 IAC 218 Subpart TT: See nonapplicability • 35 IAC 212 Subpart L: Although each individual cup machine is theoretically subject to the process weight rate rule, emissions typically would only be a small fraction of the allowable.
Streamlining	N/A
Title I Conditions	<ul style="list-style-type: none"> • The draft permit contains limits on operation and emissions in Conditions 7.3.5 and 7.3.6. These limits were incorporated from Permit 95050223. The limits only apply to some new cup machines.
Non-applicability	<ul style="list-style-type: none"> • 35 IAC 218 Subpart TT: The applicability section of Subpart TT states that this process is subject to the rule but is not subject to the control requirements of 218.986 • 35 IAC 218.301: The expanding agent and thus the material emitted is pentane. Pentane is not photochemically reactive.
Periodic Monitoring (other than basic regulatory requirements)	
Testing	None
Emissions Monitoring	None
Operational Monitoring	None
Inspections	None
Recordkeeping	Records for the new cup machines must be kept separate from the combined machines since the throughput and emission limits in Conditions 7.3.5 and 7.3.6 only apply to the new machines.

Emission Unit – Cup Manufacturing	
Other	
Reporting	
Prompt Reporting	Exceedance of material usage or emissions limits
Other Reporting	None
Other Information	
Footnotes	

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